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ABSTRACT

This document provides basic skill performance expectations for all Oregon students by the end of grade 11 to be incorporated into 15 vocational programs. (Exceptions are that in technology education, the skills identified are only for grade 8; in home economics, the identified skills are for grades 8 and 11.) The skills, which are in reading, writing, speaking, listening, mathematics, reasoning, and study skills, were selected by educators throughout the state. A skill-by-program matrix illustrates which programs incorporate each skill and at what levels. The skills appear on the matrix in seven categories (symbol systems; interpret literal meanings; interpret implied meanings; evaluate content; generate ideas; reasoning skills; and manage personal habits). The vocational programs involved are accounting; agriculture; child care services; construction; electronics technology; food service; forestry; health occupations; home economics; hospitality, tourism, and recreation; marketing; mechanical technology; metals manufacturing; office systems; and technology education. One of the following levels of incorporation is indicated in each cell of the matrix: (1) the skill is taught and tested; (2) the skill is reinforced and tested; (3) the skill is reinforced but not tested; and (4) the skill is neither taught nor tested. The document directs Oregon local school districts to show progress toward implementation by September 1990 and to have identified essential learning skills for all programs by September 1991. (CML)

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Essential Learning Skills in Vocational Technical Education

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Essential Learning Skills

With the help of educators throughout the state, Essential Learning Skills were developed to establish basic skill performance expectations for all students in the areas of reading, writing, speaking, listening, mathematics, reasoning and study skills. The Essential Learning Skills were carefully selected from a vast array of objectives. They represent consensus decisions about skills which are basic to all students' learning.

The Essential Learning Skills represent a broader and stronger definition of basic skills. They go beyond "the three R's" to include learning skills needed in our Information Age. Critical thinking, problem solving, speaking, listening and study skills are required as well as the traditional reading, writing and mathematics skills.

Since the Essential Learning Skills are necessary for all students, they must be the basic instructional concern of all teachers. The skills are not specific to any one discipline but provide a link across all disciplines. Skills and abilities do not grow in isolation from content; they are strengthened through practice and use in all subject areas.

This matrix is designed to illustrate how the Essential Learning Skills are incorporated into vocational programs. Local districts, using this matrix as a guide, will be able to identify which Essential Learning Skills are taught in each vocational program. The Essential Learning Skills were correlated with the content of each vocational program through either a technical committee or a teacher committee. The Essential Learning Skills for Office Systems and Accounting programs were identified through the use of a technical committee which included representatives from business and industry.

Teacher committees were utilized to determine the level of incorporation for the Essential Learning Skills in these programs: Child Care Services; Marketing Education; Electronics Technology; Mechanical Technology; Forestry; Hospitality, Tourism and Recreation; Health Occupations; Construction; Home Economics; Agriculture; Metals Manufacturing; Food Service and Technology Education/Industrial Arts. These committees were composed of classroom teachers identified by state specialists in the Division of Vocational Technical Education. Work was completed under the direction of the specialists.

Each committee identified one out of four levels for incorporation of each Essential Learning Skill. The four levels are:

I - the skill is taught and tested;
II - the skill is reinforced and tested;
III - the skill is reinforced but not tested; and
N/A - the skill is neither taught nor tested.

Seven categories serve as organizers for the Essential Learning Skills, identifying the most general outcomes expected of students. Under each of the seven categories specific skills are listed that identify student learning outcomes. For Technology Education, Essential Learning Skills were identified for grade 8 only. Essential Learning Skills for Home Economics were mapped for both grades 8 and 11. For all other programs, the Essential Learning Skills listed describe the learning outcomes for students by the end of grade 11.

Implementation Timeline

By September, 1990, Districts should show progress towards implementation of Essential Learning Skills in vocational technical education programs. By September, 1991, Districts should have identified Essential Learning Skills for all vocational technical education programs.

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	Accounting	Agriculture	Child Care Services	Construction	Electronics Technology	Food Service	Forestry	Health Occupations	Home Economics (11th	Home Economics (8th)	HTR I***	Marketing	Mechanical Technology	Metals Manufacturing	Office Systems	Technology Education
1 SYMBOL SYSTEMS																
1.1 RECOGNIZE WORDS																
b. Context clues	I	III	I	N/A	III	III	N/A	I	III	II	III	I	III	III	I	I
c. Affixes, root words	I	I	II	N/A	I	III	III	II	III	II	N/A	I	III	III	II	N/A
d. Written materials common words	I	I	II	I	III	III	III	III	III	II	III	I	III	II	II	I
1.2 DETERMINE MEANING																
a. Context clues, punctuation and syntax	I	III	III	N/A	III	III	N/A	I	III	II	III	I	III	II	I	II
b. Affixes and root words	I	III	III	N/A	I	N/A	III	II	III	II	III	I	III	II	II	N/A
c. Dictionaries, glossaries and definitions	I	III	II	III	I	III	I	II	II	II	III	I	III	II	II	II
1.3 STANDARD PRONUNCIATION																
b. Standard English	I	I	II	III	III	III	II	III	III	III	III	I	III	I	III	III
c. Oral presentations	I	I	II	N/A	I	III	II	III	II	III	II	I	III	I	II	I
1.4 QUANTITATIVE DATA																
a. Read, write and order numbers	I	I	II	II	I	II	II	III	II	I	III	I	II	I	I	I
b. Order, compare, and model commonly used fractions, decimals and percents	I	I	II	N/A	II	II	II	N/A	III	I	III	I	II	I	I	I
c. Mathematical terms and symbols of quantity, order and operation	I	I	II	II	I	II	III	III	III	I	III	N/A	II	I	I	I
d. Mathematical operations	I	I	N/A	II	I	II	II	III	II	I	III	I	II	I	I	I
**e. Convert among decimals, percents and commonly used fractions	I	I	N/A	II	II	II	II	III	II		III	N/A	I	I	I	
1.5 DESCRIBE AND CLASSIFY																
a. Identify geometric shapes	N/A	I	II	III	I	III	III	N/A	III	III	N/A	I	I	I	N/A	III
b. Model/make drawings in solving problems	N/A	I	II	III	I	III	I	N/A	II	N/A	N/A	I	III	I	I	I
c. Symmetry, congruency and similarity	N/A	I	N/A	III	I	N/A	N/A	N/A	III	III	N/A	I	III	I	III	I
d. Rectangular coordinate system	N/A	I	N/A	II	I	N/A	I	N/A	N/A	N/A	N/A	I	II	I	I	I
1.6 MAKE PREDICTIONS																
a. Probability	II	I	II	N/A	N/A	II	II	N/A	N/A	III	II	I	II	N/A	I	III
b. Tables, graphs, formulas and models	II	I	II	II	I	N/A	I	III	III	III	II	I	I	I	I	III
c. Displaying data	I	I	II	III	I	III	I	N/A	III	III	II	I	I	I	I	III
d. Mean, mode, median, range and percentile	II	I	N/A	N/A	N/A	N/A	III	N/A	III	N/A	II	I	II	N/A	I	III
e. Formulas solving problems	II	I	N/A	I	I	N/A	I	III	II	N/A	II	I	I	I	I	N/A
f. Ratio, percent and rates	II	I	III	II	I	II	III	N/A	II	N/A	II	I	I	I	I	I
g. Ratio and proportion	II	I	N/A	III	I	II	III	N/A	III	II	II	I	I	I	I	I
1.7 ESTIMATE AND MEASURE QUANTITIES																
a. Problem-solving strategy	I	I	N/A	II	I	II	I	III	II	II	III	I	II	I	I	I
b. Estimate answers	II	I	N/A	III	I	N/A	I	III	II	N/A	III	I	I	III	I	I
•d. Time and money										II						II
e. Measurements	I	I	N/A	I	I	II	I	I	II	III	II	I	I	I	I	I
•h. Proportions and formulas										II						II
i. Percentage problems	I	I	N/A	II	I	II	I	N/A	II	II	III	N/A	I	III	I	I
2 INTERPRET LITERAL MEANINGS																
2.1 IDENTIFY MAIN IDEAS																
a. Distinguish facts from opinions	I	I	II	N/A	III	III	III	III	III	II	III	I	II	N/A	I	III
b. Recall facts and opinions	I	I	II	N/A	N/A	III	III	III	III	II	III	I	III	N/A	I	III
c. Arrange facts, opinions,details	I	I	II	N/A	I	N/A	II	II	II	II	I	I	II	I	I	III
e. Follow directions	I	I	II	III	II	II	I	I	I	II	III	N/A	II	I	I	I
2.2 USE INSTRUCTIONAL MATERIALS																
a. Locate information	II	I	II	III	I	III	III	I	II	II	III	N/A	I	I	I	III
b. Preview and review	N/A	I	II	II	III	III	III	III	III	III	III	N/A	I	III	III	III
c. Diacritical markings	N/A	III	N/A	N/A	N/A	N/A	N/A	III	III	III	N/A	III	N/A	N/A	III	N/A
d. Thesaurus, almanac, Bartlett's Quotations	N/A	II	N/A	III	N/A	N/A	N/A	III	III	N/A	I	III	N/A	N/A	I	N/A
2.3 USE ORAL COMMUNICATION																
a. Paraphrase	I	II	II	III	III	III	III	III	II	III	III	I	III	III	I	I
b. Oral directions	I	II	II	III	III	III	III	III	II	III	I	I	III	III	I	I
c. Ask questions	II	II	II	III	III	III	III	III	II	III	I	I	III	III	I	II
d. Share orally	II	I	II	III	III	III	III	III	III	III	I	I	III	III	I	II
e. Develop detail	I	I	II	III	II	II	III	III	III	III	I	N/A	II	III	I	II
g. Take and make notes	I	I	II	III	II	II	III	III	III	III	I	I	III	III	I	II
**h. Summaries from oral presentations	I	I	II	N/A	II	III	III	III	III	II	III	I	III	III	I	I
i. Multi-step oral instructions	I	I	II	II	II	II	III	III	III		III	I	II	III	I	I

3. INTERPRET IMPLIED MEANINGS																
3.1 COMPREHEND IMPLIED MEANINGS																
a. Relate new information	II	I	II	III	N/A	III	III	III	III	II	III	I	I	III	I	I
b. Synthesize information	II	I	II	III	N/A	III	III	III	III	II	III	I	I	III	I	I
c. Literal and implied meanings	II	III	II	III	N/A	III	N/A	N/A	III	II	I	I	II	III	I	I
d. Cause and effect	N/A	I	II	III	N/A	II	III	III	II	II	II	I	I	III	I	I
e. Defend conclusions	I	I	II	III	N/A	III	III	III	II	II	III	I	III	III	I	III
f. Inferences and conclusions	II	III	II	N/A	N/A	III	III	N/A	III	I	III	I	III	III	I	N/A
g. Interpret subtleties of emotional and intellectual states	N/A	I	II	III	N/A	II	III	I	II	III	III	I	N/A	III	I	III
h. Double meanings	I	III	II	III	N/A	N/A	N/A	III	II	III	III	I	N/A	III	I	III
4. EVALUATE CONTENT																
4.1 DETERMINE SIGNIFICANCE																
a. Logical and illogical	I	I	II	N/A	N/A	N/A	III	III	II	III	II	I	I	III	I	III
b. Propaganda	N/A	I	II	III	N/A	N/A	III	III	II	II	II	I	III	III	I	III
c. Biases and stereotypes	N/A	I	II	III	III	N/A	III	III	II	II	II	I	III	III	I	III
4.2 ORAL COMMUNICATION																
a. Logical answers	II	I	II	III	III	III	III	II	III	III	II	I	I	I	I	III
b. Verify information	II	I	II	III	III	III	III	III	III	III	II	I	II	I	I	III
c. Express own feelings, knowledge and beliefs	I	I	II	III	III	III	III	N/A	III	III	II	I	III	III	I	III
••d. Argue opposite sides	N/A	I	II	N/A	III	N/A	III	N/A	III		II	I	III	III	I	
e. Sources of persuasion	N/A	I	III	N/A	III	II	III	II	III	II	II	I	III	III	I	III
f. Verbal persuasion techniques	N/A	I	III	N/A	III	II	III	III	II	II	II	I	III	III	I	III
4.3 DISTINGUISH AND INTERPRET																
a. Sounds of nature and environment	N/A	I	II	III	N/A	N/A	III	I	N/A	N/A	II	I	III	III	III	N/A
b. Interpretation of sounds	N/A	I	II	N/A	I	N/A	I	I	N/A	N/A	II	I	I	III	III	I
4.4 EVALUATE PRESENTATIONS																
a. Evaluate mass media	N/A	I	II	N/A	N/A	III	III	III	II	III	II	I	N/A	III	I	III
b. Listen, read, view	N/A	II	II	N/A	III	III	II	II	III	N/A	II	I	II	N/A	I	I
c. Propaganda techniques	N/A	I	II	III	III	II	N/A	III	II	II	II	I	III	N/A	I	III
••d. Defenses against propaganda	N/A	I	II	N/A	III	N/A	N/A	III	II	II	II	I	III	N/A	I	
5. GENERATE IDEAS																
5.1 VARIETY OF TECHNIQUES																
a. Writing/speaking	I	I	II	N/A	III	III	III	III	III	II	II	I	III	III	III	I
b. Idea generation techniques	N/A	III	I	N/A	III	III	III	III	III	II	II	I	II	III	I	I
c. Record ideas for later use	I	III	I	N/A	II	III	III	I	II	II	II	I	I	III	I	I
d. Personal reading as source of topics	N/A	I	I	N/A	III	N/A	III	III	III	III	II	I	N/A	III	III	I
e. Discuss and share	I	I	II	N/A	III	III	III	III	III	III	II	I	III	III	II	I
5.2 ORGANIZE IDEAS																
a. Classify	II	I	II	N/A	III	III	III	III	II	III	II	I	III	III	II	I
b. Support ideas/concepts	II	I	II	N/A	III	N/A	III	II	II	III	II	I	III	III	I	I
c. Select/use details	II	I	II	N/A	II	III	III	III	II	III	II	I	I	III	I	I
d. Organize information	II	I	II	III	II	III	II	III	II		II	I	III	III	I	I
••e. Oral presentation	I	I	II	N/A	III	III	III	III	II		II	I	II	III	I	
5.3 SELECT APPROPRIATE FORM																
a. Write in a variety of forms	I	I	II	N/A	I	N/A	N/A	III	III	II	III	I	III	I	I	I
b. Appropriate for purpose	I	III	II	N/A	I	N/A	N/A	III	III	II	III	I	N/A	III	I	I
5.4 PRESENT IDEAS																
a. Complete sentences	I	III	II	N/A	II	III	III	III	III	II	III	I	III	III	II	III
b. Write essays	I	II	N/A	N/A	II	N/A	III	III	III	III	III	I	N/A	III	I	III
c. Main idea and closing sentence	I	III	II	N/A	III	III	III	III	III	II	III	I	III	III	I	I
d. Multiparagraph essays	I	III	N/A	N/A	III	N/A	III	III	III	II	III	I	N/A	III	I	III
e. Narrative, descriptive, expository and persuasive modes	I	N/A	N/A	N/A	III	N/A	III	III	III	II	III	I	III	III	I	N/A
5.5 ORAL PRESENTATIONS																
a. Convey information	I	I	II	N/A	III	III	III	III	III	III	III	I	III	III	I	I
b. Gestures and inflections	I	I	II	N/A	N/A	III	I	III	III	III	III	I	III	III	II	N/A
c. Design communication	II	I	II	N/A	III	III	III	III	III	III	III	I	N/A	N/A	I	I
d. Oral and visual presentations	I	I	II	N/A	III	III	III	III	III	III	III	I	N/A	III	I	I
e. Evaluate effects	I	I	II	N/A	N/A	III	III	III	III	III	III	I	N/A	N/A	I	III
5.6 EVALUATE AND REVISE																
a. Revise own writing	I	II	III	N/A	III	III	III	III	III	III	III	I	III	III	I	I
b. Sentence structures	I	II	III	N/A	III	III	III	III	III	III	III	II	N/A	III	I	III
c. Meaning, clarity and precision	I	II	N/A	N/A	III	III	N/A	III	III	III	III	II	N/A	III	I	III
d. Distinguish subtleties	I	III	N/A	N/A	N/A	N/A	N/A	N/A	III	N/A	III	I	N/A	N/A	I	III
e. Transitional words	I	III	N/A	N/A	N/A	N/A	III	N/A	III	III	N/A	II	N/A	N/A	I	III
5.7 APPLY CONVENTIONS																
a. Edit	I	II	II	N/A	I	N/A	III	III	III	III	III	I	III	III	I	III
•b. Spell correctly										III						III
•c. Produce final copy										III						III

6. REASONING SKILLS																
6.1 RECOGNIZE RELATIONSHIPS																
a. Classification system	II	I	II	N/A	I	N/A	I	III	III	II	I	I	N/A	N/A	I	I
b. Analogies, models, metaphors	N/A	N/A	N/A	N/A	I	N/A	III	III	III	III	N/A	II	III	N/A	I	I
c. Interactions	I	N/A	III	N/A	I	N/A	I	III	III	II	III	I	III	N/A	I	I
6.2 GENERATE INTERPRETATIONS																
a. Explanation and interpretation	II	I	N/A	N/A	I	N/A	III	III	III	II	I	I	N/A	N/A	I	I
b. Hypothesis	II	I	N/A	N/A	I	N/A	I	III	III	II	I	I	III	N/A	I	I
c. Test hypotheses	II	I	N/A	N/A	I	N/A	I	N/A	III	II	I	I	III	N/A	I	I
6.3 IDENTIFY PROBLEMS																
a. Clarify problems	II	I	II	N/A	I	III	II	II	II	II	I	I	I	N/A	I	I
b. Define a problem	I	I	II	III	I	III	II	II	II	II	I	I	I	III	I	I
c. Solving identified problem	I	I	II	III	I	III	II	II	II	II	I	I	II	III	I	I
d. Solving variety of problems	II	I	II	II	I	III	II	II	II	II	I	I	I	III	I	I
e. Evaluate problem-solving strategies	II	I	N/A	III	I	III	III	II	II	II	I	I	I	III	I	I
f. Cooperative problem solving	I	III	II	III	I	III	II	II	III	II	I	I	II	III	I	I
g. Analyze data	I	II	N/A	III	I	III	II	II	III	II	I	I	III	N/A	I	I
**h. "Real-world" problems	I	I	N/A	N/A	I	III	I	N/A	II		N/A	I	I	III	I	
6.4 REASONED EVALUATIONS																
a. Fallacies	N/A	III	N/A	N/A	N/A	N/A	III	III	II	II	III	I	III	III	I	III
b. Appropriate communication	II	I	II	N/A	III	N/A	III	III	III	II	III	I	III	III	I	III
c. Evaluate arguments/positions	II	III	II	N/A	III	N/A	III	III	III	II	III	I	N/A	III	I	III
d. Assess the worth of action	N/A	I	II	N/A	III	N/A	III	III	III	II	II	I	III	N/A	I	III
e. Assess the quality	N/A	I	II	III	III	III	III	I	II	II	I	I	III	I	I	III
6.5 FORMULATE A POSITION																
a. Analyze authoritative data	II	II	II	N/A	II	N/A	III	III	III	III	III	I	III	N/A	I	I
b. Defend a position	II	II	II	N/A	III	N/A	III	III	III	III	III	I	III	III	I	III
c. Analyze arguments	II	III	N/A	N/A	III	N/A	III	III	III	III	N/A	I	III	N/A	I	III
6.6 OWN REASONING																
a. Deductive or inductive reasoning	I	II	III	N/A	III	N/A	III	III	III	III	N/A	I	N/A	N/A	I	I
b. Evaluate bias	N/A	II	III	N/A	N/A	N/A	III	III	III	III	I	I	N/A	N/A	I	III
c. Defend position	N/A	II	III	N/A	III	N/A	III	III	III	III	III	I	N/A	N/A	I	III
7. MANAGE PERSONAL HABITS																
7.1 CLARIFY PURPOSES																
a. Purpose of assignment	I	I	II	III	III	III	I	III	II	III	I	I	III	I	III	I
b. Determine ideas in assignment	I	I	II	III	II	III	I	III	II	III	I	I	N/A	I	II	I
7.2 USE RESOURCES																
a. Media materials	N/A	I	II	N/A	I	III	III	III	III	III	III	I	III	III	III	I
b. Reference materials	N/A	I	II	N/A	I	III	III	III	III	III	III	I	II	III	III	III
c. Library services	N/A	I	II	N/A	III	III	III	III	III	III	III	II	III	III	II	III
7.3 STUDY TECHNIQUES																
a. Study plan	I	III	II	N/A	III	N/A	III	III	II	II	III	III	II	I	III	I
b. Study techniques	I	III	II	III	III	N/A	I	III	III	II	III	III	II	N/A	III	I
c. Reading rate	I	III	II	N/A	N/A	N/A	N/A	N/A	III	N/A	III	III	N/A	N/A	III	N/A
d. Study materials	I	I	II	III	III	N/A	III	III	III	III	III	II	I	I	III	I
e. Assignments on time	I	I	II	III	I	II	III	III	II	II	III	III	I	I	III	I
f. Test-taking techniques	I	I	II	N/A	III	II	II	III	III	II	III	III	N/A	III	III	I
7.4 POSITIVE HEALTH BEHAVIORS																
a. Personal dietary plan	N/A	III	N/A	N/A	N/A	II	N/A	II	II	II	N/A	III	N/A	N/A	III	N/A
b. Substance use which affects physical and mental performance	N/A	III	N/A	N/A	III	N/A	III	II	II	II	I	III	N/A	III	III	N/A
c. Effects of stress	N/A	III	II	N/A	III	N/A	III	II	II	II	N/A	II	N/A	III	III	N/A
d. Personal fitness	N/A	I	II	N/A	III	III	II	II	II	II	N/A	III	N/A	III	III	N/A

KEY

I Skill is taught and tested in the curriculum; language may be modified to reflect the subject area specialty

II Skill is reinforced and tested in the curriculum; language may be modified to reflect the subject area specialty

III Skill is reinforced but not tested; language may be modified to reflect the subject area specialty

N/A Skill is neither taught nor tested in the curriculum

*Completed by 8th grade only

**Completed by 11th grade only

***Hospitality, Tourism, Recreation

Verne A. Duncan
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of Public Instruction

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